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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,268

02/15/2007

Judit E. Puskas

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9751

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EXAMINER

HAYES, BRET C

ART UNIT

PAPER NUMBER

3641

MAIL DATE

DELIVERY MODE

09/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,268	Applicant(s) PUSKAS ET AL.	
	Examiner BRET HAYES	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-37 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Objections

1. Claims 1, 11, 20 and 31 are objected to because of the following informalities: specific gravity is a ratio of the density of a solid or liquid to the density of water, and, therefore by definition, a dimensionless number. Any and all references to “grams per cubic centimeter” should be removed.

2. Claim 20, at line 3, recites “specific gravity, 7.8”, which would more correctly be --and a specific gravity of 7.8--.

Appropriate correction is required.

Claim Rejections - 35 USC §§ 102 and 103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 19 and 21 – 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent No. 5,786,416 to Gardner et al. (*Gardner*).

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6. Re claims 1 – 3, 11, 15, Gardner discloses the claimed invention including a polymer-based ammunition, comprising: a composite material including a polymer matrix including at least one thermoplastic elastomeric polymer (TPE) component, and at least one soft elastomeric polymer component; particles of a sufficiently high specific gravity material that are dispersed in the polymer matrix and present in an amount such that the composite material has a specific gravity of in a range from about 2 to 3 grams per cubic centimeter; and the composite material having a shape of a pre-selected projectile. See Abstract and col. 4, lines 25 – 30.

7. Re claim 4, While Gardner appears to be silent with respect to the structure, such is considered to be an inherent structure of the material because Gardner discloses an identical material for an identical purpose.

8. Re claims 5 and 10, Gardner discloses the claimed materials, col. 4, lines 42 – 65. Claim 10 is rejected as claim 4 is above.

9. Re claims 6 and 7, Gardner discloses the claimed invention except for the preferred materials explicitly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select from known, like materials, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. In this case, so long as the material provided the required physical characteristics sought, it would be an obvious selection to a skilled artisan at the time the invention was made. Rationale: The claim would have been obvious because substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

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10. Re claim 8, 9, 12 – 14, Gardner discloses the claimed invention except for the preferred ranges of the components explicitly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the percentages of components, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

11. Re claims 16 and 17, see claim 4 regarding inherent properties of materials.

12. Re claim 18, Gardner discloses such materials, col. 5, lines 35 – 40.

13. Re claim 19, Gardner discloses that iron is a known material, col. 2, line 6.

14. Claims 21 and 22 are being treated as a product-by-process claims. See MPEP § 2113. “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966.

Gardner discloses the claimed invention.

15. Re claim 23 – 26, see claim 4 regarding inherent properties of materials.

16. Re claim 27 – 37, in light of the above rejections, Gardner either anticipates or obviates the claimed composite material.

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Allowable Subject Matter

17. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication should be directed to Bret Hayes at telephone number (571) 272 – 6902 or email address bret.hayes@uspto.gov, which is preferred. The examiner can normally be reached Monday through Friday from 5:30 am to 2:00 pm, Eastern Standard Time.

The Central FAX Number is **571-273-8300**.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached at (571) 272 – 6873.

/Bret Hayes/

Primary Examiner, Art Unit 3641

1-Oct-08